

AMENDMENTS TO THE CLAIMS:

1-10. [Previously Cancelled]

11. [Previously Presented] A solid oxide fuel cell comprising an electrode layer applied to an electrolyte layer wherein the electrode layer is not contiguous but rather is formed from a plurality of substantially discrete hexagonal elements separated by substantially linear and uniform gaps, such that adjacent hexagons have parallel edges, wherein the gaps take up less than about 2% of the surface area of the electrode.

12. [Currently Amended] A method of applying an electrode layer to an electrolyte layer in a SOFC comprising the steps of:

- (a) providing a screen defining a pattern comprising a plurality of discrete elements;
- (b) screen printing an electrode paste through the screen and onto the electrolyte such that the resulting electrode layer comprises a plurality of discrete elements that have a regular hexagonal shape and which are separated by substantially linear, uniform and narrow gaps, wherein the gaps take up less than about 5% of the surface area of the electrode, such that adjacent polygonal discrete elements have parallel edges and form a pattern comprising a honeycomb array of elements; and
- (c) sintering the electrode layer.

13. [Previously Presented] The method of claim 12 further comprising the step of adding a contact paste layer over the electrode layer.

14. [Cancelled]

15. [Currently Amended] A solid oxide fuel cell comprising an electrode layer applied to an electrolyte layer wherein the electrode layer is discontinuous and comprises a plurality of substantially discrete polygonal elements **that are hexagonal in shape** separated by substantially uniform gaps, wherein the gaps take up less than about 5% of the surface area of the electrode, and wherein adjacent polygonal elements have parallel edges.

16. [Cancelled]

17. [Currently amended] The solid oxide fuel cell of claim 17 15 wherein said hexagons are regular hexagons.

18. [Previously Presented] The solid oxide fuel cell of claim 15 further comprising a contact paste layer applied to the electrode layer.

19. [Previously Presented] The solid oxide fuel cell of claim 18 wherein the contact paste layer is a conducting ceramics including lanthanum cobaltate.

20. [Previously Presented] The solid oxide fuel cell of claim 19 wherein the contact paste layer is not sintered prior to use.

21. [Cancelled]

22. [Previously presented] The solid oxide fuel cell of claim 15 wherein the gaps take up less than 2% of the surface area of the electrode.

23. [Previously Presented] The solid oxide fuel cell of claim 22 wherein the gaps take up less than about 1% of the surface area of the electrode.